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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,190	05/17/2005	Sylvie Camaro	271936US0X PCT	2381
22850	7590	06/27/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			VANOY, TIMOTHY C	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/535,190	CAMARO ET AL.	
	Examiner Timothy C. Vanoy	Art Unit 1754	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 May 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-23 and 27-29 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-11, 13, 15-23 and 27-29 is/are allowed.
- 6) Claim(s) 12 and 14 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 May 2005 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>08/08/2005</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because non-initialed and/or non-dated alterations have been made to the residence of the inventor Quentin Ragetly in the oath or declaration. See 37 CFR 1.52(c).

Specification

- a) Two different abstracts have been provided for this specification. The applicants should submit a single abstract for this specification, and ensure that it is less than 150 words and in the form of a single paragraph.
- b) The specification should be amended to provide a "Brief Description of the Drawings" with a brief description of each of the figures, individually.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a) In claim 12, the range "7/8 to 1.5" is confusing and incomplete. It is not clear what the range is.
- b) In claim 14, there is no antecedent basis in the previous claim language for the "encapsulant" mentioned in steps b and c. The claim language does not particularly point out and distinctly set forth exactly what the "encapsulant" is. Is the "encapsulant" only the "organic encapsulation material" or is the "encapsulant" a combination of the "organic encapsulation material", "hydrogen trapping compound" and "solid waste"?

Claim Rejections - 35 USC § 102

Claim Rejections - 35 USC § 103

None of the claims have been rejected under either 35USC102 or 35USC103 because none of the references of record teach or suggest the composition of the general formula: MX(OH) where M represents a divalent transition element; O represents oxygen; X represents an atom of group 16 of the Periodic Table of Elements (excluding oxygen), and H represents a hydrogen atom, as set forth in applicants' claim 1. None of the references of record teach or suggest the use of composition of applicants' claim 1 in a process for encapsulating solid waste, as set forth in applicants' claim 14. None of references of record teach or suggest the combination of the composition of applicants' claim 1 together with an organic encapsulation material, as

set forth in applicants' claim 21. None of references of record teach or suggest the use of the composition of applicants' claim 1 for trapping hydrogen, as set forth in applicants' claim 27. None of the references of record teach or suggest the claimed method for manufacturing the composition of applicants' claim 1, as set forth in applicants' claim 6.

The following references are made of record:

U. S. Patent 4,717,510 disclosing the use of a bituminous material as an encapsulating agent for waste material (please see claim 9);
U. S. Patent 6,709,497 B2 disclosing a honeycomb hydrogen storage structure;
U. S. Patent 6,708,546 B2 disclosing a honeycomb hydrogen storage structure;
U. S. Patent 6,616,738 B2 disclosing a hydrogen storage and release apparatus;
and
U. S. Patent 5,700,443 disclosing a hydrogen storing member and a process for storing hydrogen.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy C. Vanoy whose telephone number is 571-272-8158. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Timothy C Vanoy
Timothy C Vanoy
Primary Examiner
Art Unit 1754

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